

STATE OF CALIFORNIA • OFFICE OF TRAFFIC SAFETY OTS-136 (Rev. 11/04)

	_	Traffic Engineering Section  TOMATED COLLISION & ANALYSIS TRACKING SYSTEM – GIS  (Summarize project goals and objectives. Maximum 750 characters—about 100-150 words)  ffic Engineering Section proposes, with the help of a grant through the State of California - Office of Traffic tomated collision and tracking program with GIS capabilities for use by the Engineering staff to proactively ing collision and injury patterns within its City.  Requested Funding by Budget Category:  Personnel: \$0.00  Travel: \$0.00  Contractual Services: \$30,000.00  Equipment: \$0.00  Other Direct Costs: \$0.00  Indirect Costs: \$0.00  Indirect Costs: \$0.00  Fiscal Year 1 2006 \$30,000.00  Equip Transportation Planner  (10-1-05 to 9-30-06)  Fiscal Year 2 2007 \$50.00  (10-1-06 to 9-30-07)		
Agency Name:	Milpitas		Jurisdiction:	Line Line
Department:	(Police Dept., Dept. of Health, Eng	gineering Dept., etc.)	County:	Santa Clara
Engineering Depa	rtment - Traffic Engineering Section		The state of the s	
Proposal Title:	AUTOMATED COLLISION & AN	IALYSIS TRACKING SYSTE	EM – GIS	
Safety, to impleme	tas – Traffic Engineering Section proposent an automated collision and tracking	ses, with the help of a grant throprogram with GIS capabilities	ough the State of Califo	rnia - Office of Traffic
Equipment: (if Not Applicable  0  0  0	applicable)	Personnel: Travel: Contractual Servic Equipment: Other Direct Costs	es: \$30	\$0.00 \$0.00 0,000.00 \$0.00
	Agency Contact	·····································	Requested Fundin	g集結門協學加美洋英
First Name:	Jaime			
Last Name:	Rodriguez		All resident and American Transfer and the second s	<b>\$30,000.00</b>
Title: Address 1:		(10-1-05 to 9-30-06)		
Address 2:	435 E. Calavelas Biva	Fiscal Year 2	2007	\$0.00
Address 3:		(方) おっというが はより数のより数さまり	THE PARTICULAR OF PARTIES.	
City:	Milpitas			
State:	<u>CA                                    </u>		Total	\$30,000.00
Phone #:	408-586-3335 Ext.:			
FAX #: E-mail:	408-586-3305			
e-mail;	jrodriguez@cl.milpitas.ca.gov			

Pro	posed Budget		
BUDGET CATEGORY	Federal Fiscal Year 1	Federal Fiscal Year 2	Project Total
	10/1/05 - 9/30/06	10/1/06 - 9/30/07	10%的扩展员制度的
A. PERSONNEL (Include position title, monthly rate and % of time on			
project)			
Not Applicable - The City will cover all staff costs associated to the implementation of the system.	0.00	0.00	\$0.00
			\$0.00
			\$0.00
		!	\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
Employee Benefits @%			\$0.00
Category Sub-Total	\$0.00	\$0.00	\$0.00
B. TRAVEL			<del></del>
In-State	0.00	0.00	\$0.00
Out-of-State	0.00	0.00	\$0.00
			\$0.00
Category Sub-Total	\$0.00	\$0.00	\$0.00
C. CONTRACTUAL SERVICES  Consultant to Implement an Automated Tracking & Analysis System w/GIS Capabilities	30,000.00	0.00	\$30,000.00
			\$0.00
			\$0.00
Category Sub-Total	\$30,000.00	\$0.00	\$30,000.00

BUDGET CATEGORY	Federal Fiscal Year 1	Federal Fiscal Year 2	Project Total
D. EQUIPMENT (Unit cost \$5,000 or more, including taxes, shipping, set-up, etc.)	<u>10/1/05 - 9/30/06</u>	10/1/06 - 9/30/07	P (4) (1) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4
Not Applicable			\$0.0
l i			\$0.00
			\$0.00
			\$0.0
•			\$0.00
			\$0.00
Category Sub-Total	\$0.00	\$0.00	\$0.00
E. OTHER DIRECT COSTS (Materials, printing, etc. with unit cost less than \$5,000, including taxes, shipping, etc.)			····
Not Applicable			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
Category Sub-Total F. INDIRECT COSTS (See instructions)	\$0.00	\$0,00	\$0.00
Not Applicable			\$0.00
Category Sub-Total	\$0.00	\$0.00	\$0.00
Project Total	\$30,000.00	\$0.00	\$30,000.00

# STATE OF CALIFORNIA – OFFICE OF TRAFFIC SAFETY GRANT PROPOSAL

PROJECT TITLE: AUTOMATED COLLISION & ANALYSIS TRACKING SYSTEM - GIS

AGENCY:

CITY OF MILPITAS, CA

PROPOSED BEGINNING DATE: 10/03/2005 Proposed Ending Date: 9/30/2006

### PROBLEM STATEMENT SUMMARY:

The City of Milpitas – Traffic Engineering section does not have a system in place to assist in identifying high collision locations and crash types within the City in a timely and efficient manner. This inability to proactively monitor for recurring collision patterns has resulted in:

- 1) The reactive implementation of solutions when collisions do occur without the ability to track performance, and
- 2) The inability to recommend new innovative solutions to target specific areas and crash patterns that can help to improve the safety of residents and visitors in the City.

The City of Milpitas – Traffic Engineering Section proposes, with the help of a grant through the State of California - Office of Traffic Safety, to implement an automated collision and tracking program with GIS capabilities to address this issues.

# PROBLEM STATEMENT:

The Traffic Engineering section does maintain an in-house collision-tracking system that consists of an Access database, but with only basic collision information. Information in the existing system is manually entered from hard copies of crash reports. The system has no queering capabilities to search for traffic patterns due to the limited information contained within the system nor does the system contain the capability to display collision information in a visual format. Presently, to identify high-rate collision locations, Traffic Engineering staff use a pin-map to visually represent those locations with a high number of crashes. The pin-map does not provide the ability to see crash types or injury types such as those that are easily identifiable with the help of collision diagram. A sample of the data currently available to the Traffic Engineering Section through its existing in-house database is provided in Attachment A.

The City of Milpitas – Police Department does have their own in-house collision tracking & analysis system with GIS capabilities. Traffic Engineering is located at a different site and use of their system is currently limited to the sharing of hard-copies of the collision report that are entered into the separately maintained Traffic Engineering Access database.

A review of the City of Milpitas - Crash History over the past three calendar years is provided below:

Collision Type	2004			2003			2002					
	Coll	isions	Vic	tims	Coll	isions	Vic	tims	Col	lisions	Vi	ctims
Fatal	1		,									
Injury												
	Fatal	Injury	Killed	Injured	Fatal	Injury	Killed	Injured	Fatal	Injury	Killed	Injured
Alcohol Involved												
Speed Related												
Pedestrians		·										
Pedestrians < 15	Ţ	ļ										
Bicyclists												
Bicyclists < 15									]			]

To help proactively address the number of collisions summarized above, the Traffic Engineering has already proposed an Annual Collision Review program to identify the intersections with the highest crash rates each year and implement solutions. In order for this program to be a success, there must be a means to identify the current collision patterns and to track the success of implemented solutions. The Traffic Engineering group believes that the use of an Automatic Collision & Tracking system with GIS capabilities will help fill that gap.

#### PROPOSED SOLUTION:

The City of Milpitas – Traffic Engineering Section proposes, with the help of a grant through the State of California - Office of Traffic Safety, to implement an automated collision and tracking program with GIS capabilities for use by the Engineering staff to proactively identify and address recurring collision and injury patterns within its City.

The City of Milpitas is considered the Crossroads for transportation within the South Bay of the San Francisco Bay Area with three major state routes protruding through its borders, Intersection 680, Intersection 880, and State Route 237. Nearly 400,000 motorists, six times the population of Milpitas, traverse these routes each day.

Residents, visitors, motorists, pedestrians and bicyclists will realize substantial safety improvements after the implementation of this new system as a direct result of Traffic Engineering being able to:

- 1) Exchange current collision data with the existing Police Department system.
- 2) Identify intersections with high crash rates as part of its new Annual Collision Review program with the help of this new system.
- 3) Prepare reports with specific collision & injury patterns to successfully identify grant funding through other sources to implement innovative safety solutions and enhancements.
- 4) Use the most current collision & injury information available.
- 5) Correlate collisions with components such as roadway design, signal timing, visibility, traffic volumes, and other relevant factors not within the control of drives and implement solutions.

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#### PERFORMANCE MEASURES:

# Goal(s):

The goal of this proposed project is to implement an automatic collision & tracking system with GIS capabilities that will allow the Traffic Engineering section to utilize existing data available through the City of Milpitas – Police Department to help:

- 1) Identify Recurring Collisions and Accident Types
- 2) Implement & track the success of innovative solutions

# **Objectives**

1. To implement a system to assist Traffic Engineering in identifying roadway segments unusual collisions & injury patterns.

#### BUDGET NARRATIVE

The City of Milpitas is seeking assistance through the Office of Traffic Safety to implement an Automated Collision & Analysis system with GIS capabilities. The system will be implemented through a consultant selection process. All other staff costs and equipment costs, although not anticipated, will be covered by the City of Milpitas.

#### Personnel:

Staff costs associated with the consultant selection and implementation process will be covered by the City of Milpitas.

#### Travel:

No out-of-state travel or travel expenses are anticipated through this project.

## **Contractual Services:**

A consultant will be selected to implement an automated collision & management system for the Traffic Engineering section. Costs associated with the selection of a consultant will be covered by the City of Milpitas.

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# Equipment:

No hardware equipment is anticipated for this project. The project will result in the implementation of software applications on existing City of Milpitas equipment.

# Other Direct Costs:

Software to serve as an automated collision & management software system Traffic Collision Records System Software and a site licenses to operate the software at one location.

# **Indirect Costs:**

Not Applicable